

**COMPLETE STATEMENT OF**  
**MICHAEL L. DAVIS**  
**DEPUTY ASSISTANT SECRETARY OF THE ARMY FOR CIVIL WORKS**  
**DEPARTMENT OF THE ARMY**  
**BEFORE THE**  
**SUBCOMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE**  
**COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS**  
**UNITED STATES SENATE**  
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Mr. Chairman, members of the Subcommittee, I am Michael Davis, Deputy Assistant Secretary for Policy and Legislation, Office of the Assistant Secretary of the Army for Civil Works. I am pleased to be here today to present the Administration's and the Army's views on the draft General Accounting Office (GAO) report concerning water quality issues associated with the restoration of America's Everglades. While we have not been allowed to review the final report being released today, we will provide comments on the draft report *Comprehensive Everglades Restoration Plan Implementation Uncertainties May Lead to Additional Water Quality Projects and Costs*.

**Background**

As you know, the restoration of America's Everglades is a high priority for the Administration, including the Army Corps of Engineers. On July 1, 1999, the Vice President, on behalf of the Administration, and in partnership with the State of Florida, submitted to Congress a comprehensive plan to restore the South Florida ecosystem, which includes the Everglades, Lake Okeechobee, Florida Bay, and Biscayne Bay. The *Comprehensive Everglades Restoration Plan* (CERP) is a technically sound plan developed by scores of the Nation's best Everglades scientists and engineers. The CERP, which will be implemented over the next 30 years, will:

- Improve the health of over 2.4 million acres of the South Florida ecosystem, including Everglades National Park;
- Improve the health of Lake Okeechobee;
- Virtually eliminate damaging freshwater releases to the estuaries;
- Improve water deliveries to Florida and Biscayne Bays;

- Enhance water supply and maintain flood protection; and
- Improve water quality.

The CERP is the most ambitious ecosystem restoration project ever undertaken in the United States – if not the world. Its fundamental goal is to capture most of the fresh water that now flows unused to the sea and deliver it when and where it is needed most. Eighty percent of this “new” water will be devoted to environmental restoration, reviving the ecosystem from the Kissimmee River, through Lake Okeechobee, through Everglades National Park, to the coral reefs of Florida Bay. The remaining 20 percent will benefit cities and farmers, enhancing water supplies and supporting a strong, sustainable economy for south Florida. In short, the CERP provides the necessary road map for improving the quantity, quality, timing, and distribution of the water so vital to the health of America’s Everglades and the people of south Florida.

The next vital step for Everglades restoration is the passage this year of legislation authorizing the CERP. As you know, the Administration has been working closely with the Senate Environment and Public Works Committee on such legislation. Recently, the Administration, the Committee, the State of Florida, and a diverse group of stakeholders reached agreement on the September 14, 2000, managers amendments to S. 2797, *Restoring the Everglades, an American Legacy Act*. The Administration strongly supports S. 2797 with these amendments and recommends its immediate passage.

### **Everglades Water Quality Problems**

Restoration of the Everglades requires that we “get the water right” by addressing comprehensively each of the four interrelated factors - - quantity, quality, timing, and distribution. As such, ensuring a supply of clean fresh water is integral to the CERP.

Over the past 100 years, excessive drainage of wetlands and changes in the natural variability of water flows have altered the Everglades wetland ecosystem on a regional scale. Today, discharges to the Everglades are often too much, or too little, and frequently at the wrong times of the year. An over-abundance or scarcity of water affects plants and wildlife accustomed to the Everglades’ historic range of water flows, levels and seasons. In addition, canals and highways that criss-cross the Everglades have interrupted its historic overland sheet flow.

As a result, water quality throughout south Florida has deteriorated over the past 50 years. More than one-half of the wetlands that acted as natural filters and retention areas are gone due to agricultural and urban expansion. The remaining Everglades ecosystem is in a continuing state of decline largely as a result of altered water regimes and degraded water quality, as evidenced by vegetation change, declining wildlife populations and organic soils loss. Some untreated urban and agricultural storm water is sent directly to natural areas and estuaries. Too much, or too little, water is often sent to the estuaries. Excess phosphorus, mercury, and other contaminants harm the region’s surface water and groundwater. The water quality of the Everglades Water Conservation

Areas, the coastal estuaries, Florida Bay and the Florida Keys show similar signs of significant degradation.

Under current conditions, these natural systems cannot recover their defining characteristics and they will not survive. The health of the ecosystem will continue to decline unless we act.

### **Water Quality Features Included in the CERP**

The CERP offers a broad, comprehensive approach, which is designed to increase water supplies for the region and to restore and improve water quality throughout the Everglades ecosystem. The CERP improves the quality of water in the study area; however water quality improvement in south Florida must be viewed as an integrated effort with several interdependent parts. The CERP is designed to integrate modifications to the Central and Southern Florida project with ongoing State of Florida water quality efforts and ensure that our actions to capture and store water meets water quality requirements. These include: several components of the CERP; the State of Florida's Everglades Forever Act; Surface Water Improvement and Management Act planning efforts, including the development of pollutant load reduction goals; development of total maximum daily loads under Section 303(d) of the Federal Clean Water Act; and the Florida Keys Water Quality Protection Program.

Water quality was a consideration in every aspect of the CERP. Major features include creation of approximately 181,300 acres of surface water storage areas, totaling 1.6 million acre-feet of additional storage volume, which will allow us to capture excess fresh water flows and reduce pollution loading into downstream receiving water bodies. This valuable water, which currently is being "lost to tide," will be captured and used to provide much-needed water for restoration of the Everglades ecosystem and to enhance water supplies for the people of south Florida. Additionally, many components of the CERP include treatment features to ensure that water quality is improved. Specifically, the CERP includes 19 Stormwater Treatment Areas (STAs) totaling approximately 36,000 acres of wetlands to treat polluted runoff from urban and agricultural lands. These STAs will be located throughout south Florida, and will enable us to use the natural filtering capability offered by wetlands to treat and improve both water quality and, at the same time, contribute to the restoration of the health of the ecosystem.

Construction of extensive regional aquifer storage and recovery (ASR) facilities is an essential component of the CERP. When completed, the ASR facilities are intended to also store water during the wet season – freshwater flows that are currently lost to tide. ASR facilities will store these waters in the upper Floridian Aquifer for recovery in dry seasons – for use both to restore the ecological integrity of the ecosystem and to enhance future water supplies for urban and agricultural purposes in south Florida. These components include treatment facilities to meet applicable State of Florida water quality standards.

The CERP includes a recommendation for a feasibility study to develop a Comprehensive Integrated Water Quality Plan, to serve as a framework for integrating water quality restoration targets for south Florida water bodies into future planning, design, and construction activities included in the CERP.

We believe the CERP – in concert with other proposed and ongoing restoration efforts – represents the best way to both restore the ecological integrity of the Everglades ecosystem and to enhance water quality. While the CERP reflects the best available science, we are prepared to refine our thinking as we learn more. Thus the CERP is designed to be flexible, to incorporate and respond to new information as it becomes available. Continuous monitoring and independent scientific review are key components of the CERP. Still, we cannot wait for all the answers to begin. There is too much at stake and little time to act.

### **Our Views on the Draft GAO Report**

We appreciate the work conducted by GAO and as always we welcome constructive advice on how to improve Army water resources projects. We also appreciate GAO's willingness to meet with the Corps Jacksonville District, the Environmental Protection Agency, the Department of the Interior, and the State of Florida to discuss these important issues.

In your request to GAO you specifically asked them to (1) describe the role of the CERP in addressing the major water quality concerns in the ecosystem and (2) identify modifications that may be needed as the Corps implements the CERP. The GAO completed its report based on interviews with agency staff between May and August of this year. In addition GAO indicates that they reviewed various reports, including portions of the CERP that describe water quality projects.

In its draft report GAO concluded that “there are too many uncertainties to estimate the number and cost of Corps projects that will ultimately be needed to improve water quality.” In addition GAO concluded that it is likely that the estimated \$7.8 billion cost of implementing the CERP will increase - - also increasing the need for Congressional oversight throughout the implementation of the CERP. In this regard, we understand that GAO will recommend that the Secretary of the Army provide Congress with updates that:

- 1) reflect any cumulative project and cost changes to the CERP; and**
- 2) indicate the progress being made toward implementing the CERP.**

As discussed in more detail below, we do not take issue with the specific recommendations made in the draft report. We agree that Congress should be kept informed of our progress and of any substantial changes as we implement the CERP over the next 30 years. We have proposed legislation to require such reporting.

In regard to water quality generally, we are satisfied that the CERP reflects the proper balance between the need to have information and the need to begin the restoration of an unprecedented natural resource that is in serious trouble. Much is known about the Everglades and how it can be restored. We will learn a lot more as we go through on-going independent scientific peer review as well as through the adaptive assessment process outlined in the CERP. We strongly believe that the level of uncertainty and potential cost increases noted by GAO are manageable through the monitoring, adaptive assessment, and reporting programs that will be implemented.

While as noted above we have not reviewed the final GAO report, we will provide a few specific comments on the draft report.

**Uncertainty** - We agree that there are some uncertainties associated with the implementation of the overall CERP and project components to improve water quality in the ecosystem. Such uncertainties are expected considering the size of the project and its staged implementation over 30 years. However, the Corps, the South Florida Water Management District, and many other Federal and state partners have disclosed fully the uncertainties and proposed a methodology and process to address these uncertainties during implementation of the CERP. This methodology and process includes the preparation of feasibility level of detail Project Implementation Reports (PIRs) which will be submitted to Congress, pilot projects, and an extensive adaptive assessment and monitoring program. The PIR would be the vehicle to identify, quantify and attempt to resolve any uncertainties surrounding the cost and performance of each major component in the CERP.

We disagree that uncertainties on the proposed water quality components will absolutely lead to cost increases. The \$7.8 billion cost estimate reflects our best estimate of the cost of implementing the CERP based on information we have today considering all the uncertainties presented in the CERP. In many ways the Corps estimate is very conservative – assuming the worst case scenario. In fact, there is good reason to believe that the actual cost of some project features could be less than estimated in the CERP.

For example, the Environmental Protection Agency has indicated their willingness to consider a flexible approach to constructing and permitting the aquifer storage and recovery wells proposed in the CERP as it relates to coliform bacteria. This approach involves “risk based” analyses to confirm that this flexible approach is appropriate if certain conditions are met. If the results of water quality testing and analyses conducted as part of the aquifer storage and recovery pilot projects confirm the appropriateness of this approach, then it is possible that the total cost of the recommended comprehensive plan could be reduced by as much as \$500,000,000 and annual operation and maintenance costs could be reduced significantly as well.

In addition to the above, we should not automatically assume that overall cost of the CERP will increase because of the need to add additional water quality features. For example, it is premature to suggest that dredging sediments from Lake Okeechobee could also increase the cost of the CERP. While the State of Florida has initiated preliminary

studies to look at this concept, no Federal feasibility studies for dredging sediments from Lake Okeechobee have been initiated and to our knowledge, no cost estimate has been developed. Further, GAO includes a cost estimate in the report for this project and compares this cost with the Corps' cost estimate for CERP. Such a comparison implies that the Lake Okeechobee cost estimate has some certainty and further, that the project would be part of the CERP. We do not agree with this point.

**Congressional Reporting** - We concur with the GAO recommendation that the Army should provide Congress with updates regarding implementation progress and changes to the CERP. The Everglades restoration legislation included in the Administration's April 10, 2000, proposal for Water Resources Development Act included a provision requiring reports to Congress. This provision requires that the Secretary of the Army and the Secretary of the Interior, in consultation with the Environmental Protection Agency, the Department of Commerce, and the State of Florida, submit reports on the implementation of the CERP to Congress beginning in October 2005, and periodically thereafter until October 2036. This provision is included in S. 2797.

Since GAO completed its review, the Corps Jacksonville District and the South Florida Water Management District, the primary non-Federal sponsor on implementing the CERP, have finalized a Master Program Management Plan (MPMP) which describes the framework and process to be used for managing and monitoring implementation of the CERP. Specifically, during implementation of the CERP, the Restoration Coordination and Verification team known as "RECOVER" will periodically produce five categories of written reports. These reports will be for the purposes of (1) evaluating or assessing the performance of the CERP or its components; (2) making recommendations regarding design and operational criteria, and a system-wide monitoring/data management program for the CERP; (3) documenting the technical and scientific aspects of the evaluation and assessment tools used by the teams; (4) identifying and resolving technical issues pertaining to the performance measures; and (5) describing processes and guidelines used by the teams to achieve their objectives. In addition, an annual report card report will also be prepared to inform the public of the status, trends and success of the CERP in meeting its objectives. Collectively these reports will provide a full documentation of the activities of the RECOVER team including the cumulative changes in projects and costs and the progress of the CERP which will serve as the basis for preparing report to Congress as required in S. 2797.

## **Conclusion**

Protecting and restoring water quality is unequivocally an integral part of restoring the Everglades ecosystem. As such, addressing water quality issues have been and continue to be a fundamental objective of the CERP. Providing a reliable supply of clean fresh water to the ecosystem is at the heart of the CERP. While some uncertainties exist, we remain confident of the analysis, conclusions, and recommendations outlined in the CERP, including those germane to water quality. Further, we do not believe that based on the GAO report or any other information available at this time that Congress

should assume that the cost to implement the CERP will unreasonably increase or increase at all.

An American treasure is in serious trouble and we can do something about it. We have developed a technically sound plan of action and the Senate Environment and Public Works Committee has worked with us to develop enabling legislation. America's Everglades cannot wait until we have all the answers -- because we never will. As with any important endeavor of this nature there are risks. The risks associated with inaction, however, are clearly greater. We know more than enough to act now and act decisively by enacting S.2797 as amended on September 14, 2000.

Mr. Chairman, that concludes my statement. Again, I appreciate the opportunity to testify today before your subcommittee. I would be pleased to answer any questions you or the other subcommittee members may have.